REMARKS

Claims 83, 93, 94 and 104 have been amended to correct inadvertent typographical errors and to maintain consistency, replacing "binds to" with "interacts with". Claims 89 and 100 have been amended to correct an inadvertent grammatical error. No new matter has been added by way of amendment. Claims 83-104 are pending.

The Rejection of Claims 83-93 and 95 Under 35 USC §112, First Paragraph, Should Be Withdrawn

The Examiner rejected claims 83-93 and 95 under 35 USC §112, first paragraph, as failing to comply with the written description requirement. The Examiner argued that "the claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the Examiner states that,

> "the specification as originally filed does not reasonably communicate that the claimed invention is a method using a polypeptide which is at least 95% identical to SEQ ID NO:2 or a polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the nucleotide sequence of SEQ ID NO:1 or 3, wherein the claimed polypeptide has protease activity. This new matter rejection is also made for claim 95, drawn to "a membrane-bound form of an isolated polypeptide."

The Examiner further states,

> "Applicant states that support for the new claims are found in the previously presented claims, and pages 49-92 of the specification. However, the Office could not find support in the specification originally filed. Applicant is kindly requested to point out the support for the rejected limitation in the specification as originally filed..."

Applicants traverse this rejection and submit that support for all of the rejected claims 83-93 and 95 is found in the claims and specification as originally filed.

Specifically, support for

> "A method of evaluating a compound for the ability to interact with, e.g., bind, a subject 14094 polypeptide is provided. The method includes: contacting the compound with the subject 14094 polypeptide; and evaluating ability of the compound to interact with, e.g., to bind or form a complex with the subject 14094 polypeptide..."

is found at page 56, line 22 through page 57, line 29 of the specification as filed.

Second, support defining the polypeptides of the invention useful in such assays can be found at page 3, lines 5-10,

"In another aspect, the invention features, 14094 polypeptides, and biologically active or antigenic fragments thereof that are useful, e.g., as reagents or targets in assays applicable to treatment and diagnosis of 14094-mediated or -related disorders. In another embodiment, the invention provides 14094 polypeptides having a 14094 activity. Preferred polypeptides are 14094 proteins including at least one trypsin domain, and, preferably, having a 14094 activity, e.g., a 14094 activity as described herein,"

and at page 38, lines 3-9:

"In a preferred embodiment, a 14094 polypeptide has one or more of the following characteristics:

(i) it exhibits proteolytic activity;

(ii) it has an amino acid composition, molecular weight of a 14094 polypeptide, e.g., a polypeptide of SEQ ID NO:2 or 12;

(iii) it has an overall sequence similarity of at least 60%, preferably at least 70, more preferably at least 80, 90, or 95%, with a polypeptide of SEQ ID NO:2 or 12;"

and page 39, lines 1-2: "In one embodiment, the protein includes an amino acid sequence at least about 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95%, 98% or more homologous to SEQ ID NO:2..."

Third, support for polypeptides encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the nucleotide sequence of SEQ ID NO:1 or 3 may be found at pages 29- 33 of the specification. For example, page 29, lines 1-4 and 25-27 recite

"In one aspect, the invention provides, an isolated or purified, nucleic acid molecule that encodes a 14094 polypeptide described herein, e.g., a full-length 14094 protein or a fragment thereof, e.g., a biologically active portion of 14094 protein,"

and,

"In one embodiment, an isolated nucleic acid molecule of the present invention includes a nucleotide sequence which is at least about: 60%, 65%, 70%, 75%, 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or more homologous to the entire length of the nucleotide sequence shown in SEQ ID NO:1, 11, 13, or 3," respectively.

Finally, support for "a membrane-bound form" of an isolated polypeptide as in claim 95 can be found in the specification as originally filed at page 59, lines 30-31.

Applicants submit that the teachings discussed above and found in the specification as originally filed would certainly describe the subject matter of the rejected claims (a method for identifying a compound capable of interacting with a polypeptide, wherein the polypeptide is at least 95% identical to

SEQ ID NO:2, or is encoded by a nucleic acid molecule at least 95% identical to SEQ ID NO:1 or 3, and has protease activity) in such a way as to convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Rejection of Claims 83-87, 89-91 and 93 Under 35 USC 102(e) Should Be Withdrawn

The Examiner rejected claims 83-87, 89-91 and 93 Under 35 USC 102(e) as being anticipated by US Patent 6,294,663, filed March 2, 2000. Specifically, the Examiner argued that "the '663 patent discloses a protein sequence (i.e. SEQ ID NO:2) that is at least 95% identical to instant SEQ ID NO:2..." and "the instant claims read on the immunohistochemstry assay of the prior art at Fig. 7."

Applicants traverse the rejection and respectfully submit that the claimed methods of the instant application and those in the '663 patent are in fact very different. Applicants submit that the '663 patent does not teach each and every element of the pending claims as the method taught by the '663 patent is different from the methods claimed in the present application. Specifically, the methods taught by the '663 patent are directed to "detecting expression of a TADG-12 protein," "diagnosing a cancer or other malignant hyperplasia," "inhibiting expression of endogenous TADG-12," "targeted therapy," and "vaccinating an individual against TADG-12," whereas the methods recited in the claims of the present application are directed to identifying a compound capable of interacting with a 14094 polypeptide. The '663 patent does not mention, describe or even seem to contemplate such a method.

Applicants therefore submit that the two methods are distinct and that the method taught by the '663 patent does not fall within the scope of the claims as amended. Applicants therefore respectfully request reconsideration and withdrawal of the rejection.

CONCLUSIONS

Applicants submit that in view of the foregoing remarks and arguments, this application is now in condition for allowance. No new matter has been added.

This paper is being filed timely as Applicants believe no extension of time is required. In the event any extensions of time are necessary, the undersigned hereby authorizes the requisite fees to be charged to Deposit Account No. 501668.

Entry of the remarks made herein is respectfully requested.

Respectfully submitted,

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